

CLAIMS

1. A pigment dispersion composition
which is prepared by dispersing a pigment using at
5 least one species selected from the group consisting of a
pigment derivative, pigment intermediate, colorant
derivative and colorant intermediate each having a
functional group reactive with a carbodiimide group and
having adsorption ability on the pigment surface, and a
10 carbodiimide compound containing at least one carbodiimide
group.
2. The pigment dispersion composition according to
Claim 1,
15 wherein the pigment is dispersed using a mixture
comprising at least one species selected from the group
consisting of said pigment derivative, pigment intermediate,
colorant derivative and colorant intermediate, and said
carbodiimide compound.
- 20 3. The pigment dispersion composition according to
Claim 1,
wherein the pigment is dispersed by using a
carbodiimide-based compound introduced with a side chain
25 having pigment adsorption ability within the molecule by
reacting at least one species selected from the group
consisting of said pigment derivative, pigment intermediate,
colorant derivative and colorant intermediate with said
carbodiimide compound.
- 30 4. The pigment dispersion composition according to
any one of Claims 1 to 3,
wherein said carbodiimide compound contains, within
the molecule thereof, at least one side chain selected from
35 the group consisting of a polyester side chain, polyether

side chain, polyether polyester side chain, and polyacrylic side chain.

5 5. The pigment dispersion composition according to
any one of Claims 1 to 4,
wherein said carbodiimide compound has a carbodiimide
equivalent of 100 to 50,000.

10 6. The pigment dispersion composition according to
any one of Claims 1 to 5,
wherein the functional group reactive with a
carbodiimide group contained in at least one species
selected from the group consisting of said pigment
derivative, pigment intermediate, colorant derivative and
15 colorant intermediate is a carboxyl group, sulfonic acid
group, or phosphoric acid group.

20 7. The pigment dispersion composition according to
any one of Claims 1 to 6,
wherein said pigment intermediate is at least one
species selected from the group consisting of a naphthoic
acid and 2-carboxypyrazine, and said colorant intermediate
is a colorant residue having a functional group reactive
with a carbodiimide group.

25 8. The pigment dispersion composition according to
any one of Claims 1 to 6,
wherein said pigment is at least one pigment selected
from the group consisting of a dye chelate pigment, azo
30 pigment, benzimidazolone pigment, phthalocyanine pigment,
quinacridone pigment, anthraquinone pigment, dioxazine
pigment, indigo pigment, thioindigo pigment, perylene
pigment, perinone pigment, diketopyrrolopyrrole pigment,
isoindolinone pigment, nitro pigment, nitroso pigment,
35 anthraquinone pigment, flavanthrone pigment, quinophthalone

pigment, pyranthrone pigment, indanthrone pigment, and said pigment derivative is a derivative of said pigment.

5 9. The pigment dispersion composition according to any one of Claims 1 to 6,
 which is prepared by dispersing at least one pigment selected from the group consisting of carbon black and a phthalocyanine pigment using a phthalocyanine pigment
10 derivative having a functional group reactive with a carbodiimide group as said pigment derivative.

 10. A pigment dispersion-based resist composition which contains the pigment dispersion composition
15 according to any one of Claims 1 to 9.

 11. A compound for pigment treatment which is a carbodiimide-based compound introduced with a side chain having pigment adsorption ability within
20 the molecule by reacting at least one species selected from the group consisting of a pigment derivative, pigment intermediate, colorant derivative and colorant intermediate each having a functional group reactive with a carbodiimide group and having adsorption ability on the pigment surface,
25 and a carbodiimide compound containing at least one carbodiimide group.

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